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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,116	09/08/2003	Chien-Hsin Yang	PO92289	7047
7590	06/27/2005		EXAMINER	
Yi-Wen Tseng 509 ROOSEVELT BLVD. #D306 FALL CHURCH, VA 22044			KNAPP, JUSTIN R	
		ART UNIT	PAPER NUMBER	
		2182		

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/656,116	YANG, CHIEN-HSIN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Justin Knapp	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08 September 2003.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 September 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(a) as being anticipated by the Matrix Orbital MX214, reviewed by Miguel,

<http://web.archive.org/web/20030821012752/www.extremhz.com> (herein referred to as Miguel).

3. As per claim 1, Miguel teaches:

a microprocessor (it is inherent that the Matrix Orbital has processing circuitry);  
a first input connection, connected to a system management bus of a motherboard of the computer to obtain operation temperature, operation voltage and fan rotation speed of the computer (see Features section, temperature probes are used to obtain various temperatures and fan headers are used to obtain fan speeds);

an erasable memory, controlled by the microprocessor to store default values of operation temperature, operation voltage and fan rotation speed (see Specs section, memory chip saves settings);

a display screen, controlled by the microprocessor to display the operation temperature, operation voltage and fan rotation speed obtained by the first input connection (see Specs section, an LCD display is used to display various settings); and

an operation panel, comprising a display light and a plurality of buttons, controlled by the microprocessor to input the default values of operation temperature, operation voltage and fan rotation speed, wherein when the operation temperature, operation voltage and fan rotation speed obtained by the first input connection exceeds the default values, the display light generates a warning signal (see The Display section, Operation panel comprises several buttons and a display light).

4. As per claim 2, Miguel teaches wherein microprocessor is operative to control rotation speed of a fan in the computer to control operation temperature of the computer (it is inherent the Matrix Orbital must have processing circuitry to interact with obtaining and controlling of fan speeds).

5. As per claim 5, Miguel teaches wherein the display light includes an LED (see Features section).

#### *Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miguel in view of Tanenbaum, Structured Computer Organization 3<sup>rd</sup> Ed. Miguel does not explicitly teach further comprising a second input connection connected to a debug port of the computer, the second input connection being controlled by the microprocessor to obtain a debug code when an erred

operation of the computer occurs, and to display the debug code on the display screen in a desired language. However, Miguel does teach of bundled software called LCDC that performs these functions. Tanenbaum teaches that hardware and software are logically equivalent. Any operation performed by software can be built directly into the hardware and any instruction executed by the hardware can also be simulated in software (see page 11). Using the teachings of Tanenbaum within the apparatus of Miguel, it would have been obvious to one of ordinary skill in the art to create a second input connection to a debug port in hardware in place of the software that performs the same functions. Doing so would be more cost efficient and increase the speed of the apparatus.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miguel. Miguel does not explicitly teach the erasable memory includes an electrically erasable read only memory. Miguel does teach a memory chip used to save settings. It would have been obvious to one of ordinary skill in the art to utilize an electrically erasable read only memory to save the system settings in the apparatus of Miguel as this type of memory is extremely well known in the art for its programmability functions.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miguel in view of Kennedy, Super Cooler System Monitor, [www.tweak3d.net/reviews/amk/e2c](http://www.tweak3d.net/reviews/amk/e2c). Miguel does not explicitly teach the operation panel further comprises a speaker to generate an audio warning signal when the operation temperature, operation voltage and fan rotation speed exceed the default values. Kennedy does teach an audible overheat alarm/warning system in a similar monitoring apparatus. It would have been obvious to one of ordinary skill in the art to utilize the

audible alarm taught by Kennedy within the apparatus of Miguel as it would provide an additional feature to the apparatus making it more marketable.

*Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made. Applicant must also show how the amendments avoid such references and objections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Knapp whose telephone number is (571)272-4149. The examiner can normally be reached on Mon - Fri 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571)272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Justin Knapp".

Justin Knapp

Examiner

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June 23, 2005